## **Supplementary Material**

## Solvatomorphism and Electronic Communication in Fe<sup>III</sup> N,N-Bis(salicylidene)-1,3-propanediamine Dimers

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## **1. Supporting Figures**



Figure S1 Overlay of the Fe1-Fe2 (grey) and Fe3-Fe4 (colour) dimers in 1.



**Figure S2** View of the C-H···O interactions which form the supramolecular Fe3-Fe4 dimeric pairs in  $\mathbf{1}$ , \* = symmetry code: 2-x, 2-y, 2-z.



**Figure S3** View of the C-H···O interactions which form the supramolecular Fe1-Fe2 dimeric pairs in **2**, \* = symmetry code: 2-x, 1-y, 2-z.



**Figure S4** View of the Fe1-Fe2 and Fe3-Fe4 planes in **1** viewed on the *bc* plane.



Figure S5 PXRD of 1 at 20 °C, -120 °C and at 20 °C after heating at 150 °C.



Figure S6 PXRD of 2 at 20 °C, -120 °C and at 20 °C after heating at 150 °C.



Figure S7 Cyclic voltammograms of 1 showing the reduction peaks at different scan rates (in V/s).



Figure S8 Differential pulse voltammograms of [(salpn)Fe(μ<sup>2</sup>-salpn)Fe(salpn)]·MeOH 2 in CH<sub>2</sub>Cl<sub>2</sub> at scan rates varying from 10-100 mV/s.